

## CAT6 250-MHz Bulk Cables



**Looking beyond Category 5 and 5e?  
These cables meet a higher standard.**

## FEATURES

- Meet Category 6 standards.
- Ideal for high-bandwidth Ethernet, Fast Ethernet, Gigabit Ethernet, and 155- or 622-Mbps ATM.
- Sweep tested and characterized to 250 MHz.
- Improved attenuation for cleaner data and video transmissions.
- Smaller diameter saves space.
- PVC or plenum versions.

## OVERVIEW

Everything about data communications is getting faster. Do you have the UTP cable to keep up with the latest technologies? With our CAT6 250-MHz Bulk Cables, you will!

BLACK BOX® CAT6 250-MHz Bulk Cables support current applications, like 100BASE-TX (Fast Ethernet), 100BASE-VG, and 155- or 622-Mbps ATM. In addition, this cable is ideal for use in your future high-speed applications, such as 1000BASE-T (Gigabit Ethernet).

CAT6 250-MHz Bulk Cables consist of four solid-conductor, unshielded twisted pairs, constructed of 23 AWG solid, bare copper. The PVC versions are insulated with polyolefin, and the plenum versions have FEP insulation.

All cables come on 1000-foot (304.8-m) reels and are available in various colors. Each cable features central-slit filler film, a ripcord, and flexible jacket. All jackets are sequentially marked at two-foot intervals. Copper pairs are distinguished by these colors:

Pair 1: Blue/white, blue;  
Pair 2: Orange/white, orange;  
Pair 3: Green/white, green;  
Pair 4: Brown/white, brown.

CAT6 250-MHz Bulk Cables are also smart-priced solutions for high-speed networking. For example, you get super-reliable 250-MHz performance, compared to 100-MHz Category 5 and 5e. And since these cables come in 1000-ft. (304.8-m) lengths for those long runs, you're getting a lot of cable for your cash.

CAT6 250-MHz Bulk Cables also meet tougher requirements than Category 5 and 5e cables, especially with the standards for system noise and the limitation of various forms of crosstalk.

The Category 6 standard is defined per frequency for attenuation, characteristic impedance, and five different categories of loss and delay skew for cable performance.

For example, Category 6 measures attenuation (minimum at 100 MHz) at 19.8 dB, which is much more stringent than the 22-dB measurement for Category 5 and 5e.

So if you're looking for superior performance at an economical price, CAT6 250-MHz Bulk Cables are the cables you need now—and for the future.

## TECH SPECS

### Attenuation (Maximum) —

100 MHz: 19.9 dB;  
200 MHz: 29.2 dB;  
250 MHz: 33 dB

### Bend Radius (Minimum) — 0.5" (1.3 cm)

### Cable Type — 4-pair UTP

### Capacitance (Nominal) — 15 pF/ft. @ 1 kHz

### Conductor Gauge — 23 AWG, solid, bare copper

### Delay Skew (Maximum) — 45 ns/100 m (328 ft.)

### Diameter (Nominal) — 0.24" (0.6 cm)

### ELFEXT — 100 MHz: 24.8 dB;

200 MHz: 18.7 dB

### Flame Rating and Test —

PVC: UL® Type CMR, UL 1666 Riser, C(UL) Type CMR, CSA FT4;

Plenum: UL Type CMP, UL 910 Steiner Tunnel, C(UL) Type CMP, CSA FT6

### Input Impedance —

1–100 MHz: 100 ± 15 ohms;

100–200 MHz: 100 ± 22 ohms;

200–250 MHz: 100 ± 32 ohms

### Insulation — PVC: Polyolefin;

Plenum: FEP

### Operating Voltage (Maximum) — 300 Vrms

### PS-ACR — 22.4 dB (typical) @ 100 MHz

### PS-NEXT —

100 MHz: 42.3 dB;

200 MHz: 37.8 dB;

250 MHz: 36.3 dB

### Pulling Tension (Maximum) — 40 lb. (18.1 kg)

### Return Loss (Minimum) —

100 MHz: 20.1 dB;

200 MHz: 18 dB;

250 MHz: 17.3 dB

### Standards — TIA/EIA-568A, Category 5, Category 5e, Category 6

### Temperature Range —

PVC: -4 to +176°F (-20 to +80°C);

Plenum: -4 to +167°F (-20 to +75°C)

### Velocity of Propagation (Nominal) — 72%

### Weight — 33 lb./1000 ft. (15 kg/304.8 m)

## ELECTRICAL SPECS FOR CATEGORY 6 CABLE

### Attenuation (Minimum at 100 MHz) — 19.8 dB

### Characteristic Impedance — 100 ohms ± 15%

### Delay Skew (Maximum per 100 m) — 45 ns

### ELFEXT (Minimum at 100 MHz) — 27.8 dB

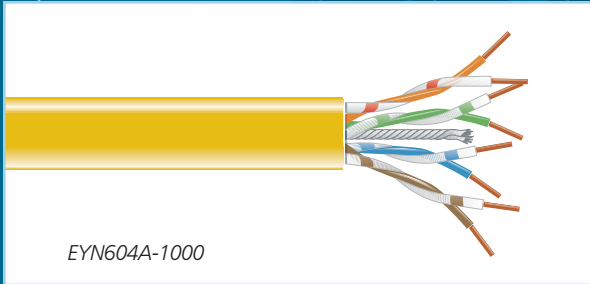
### Frequency — 250 MHz

### NEXT (Minimum at 100 MHz) — 44.3 dB

### PS-ELFEXT (Minimum at 100 MHz) — 24.8 dB

### PS-NEXT (Minimum at 100 MHz) — 42.3 dB

### Return Loss (Minimum at 100 MHz) — 20.1 dB



Item	Code
CAT6 250-MHz Bulk Cables, 4-Pair, 1000-ft. (304.8-m), PVC	
Red	<b>EYN600A-1000</b>
Orange	<b>EYN602A-1000</b>
Yellow	<b>EYN604A-1000</b>
Green	<b>EYN606A-1000</b>
Blue	<b>EYN608A-1000</b>
Gray	<b>EYN610A-1000</b>
White	<b>EYN612A-1000</b>
Black	<b>EYN614A-1000</b>

Item	Code
CAT6 250-MHz Bulk Cables, 4-Pair, 1000-ft. (304.8-m), Plenum	
Red	<b>EYN601A-1000</b>
Orange	<b>EYN603A-1000</b>
Yellow	<b>EYN605A-1000</b>
Green	<b>EYN607A-1000</b>
Gray	<b>EYN611A-1000</b>
White	<b>EYN613A-1000</b>
Black	<b>EYN615A-1000</b>

## Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

### Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p. m. and you need help, but your vendor's tech support line is closed.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.